

Translation

## PATENT COOPERATION TREATY



## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2002P01596WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/014177	International filing date (day/month/year) 20 December 2003 (20.12.2003)	Priority date (day/month/year) 20 December 2002 (20.12.2002)
International Patent Classification (IPC) or national classification and IPC D06F 58/28		
Applicant BSH BOSCH UND SIEMENS HAUSGERÄTE GMBH		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 12 July 2004 (12.07.2004)	Date of completion of this report 28 December 2004 (28.12.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/014177

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

 the international application as originally filed the description:

pages \_\_\_\_\_, 1-11, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

 the claims:

pages \_\_\_\_\_, 1-17, as originally filed

pages \_\_\_\_\_, as amended (together with any statement under Article 19

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

 the drawings:

pages \_\_\_\_\_, 1/5-5/5, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

 the sequence listing part of the description:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

 the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

 contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4.  The amendments have resulted in the cancellation of: the description, pages \_\_\_\_\_ the claims, Nos. \_\_\_\_\_ the drawings, sheets/fig. \_\_\_\_\_5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/EP 03/14177

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	5, 10, 17	YES
	Claims	1-4, 6-9, 11-16	NO
Inventive step (IS)	Claims	5, 10, 17	YES
	Claims	1-4, 6-9, 11-16	NO
Industrial applicability (IA)	Claims	1-17	YES
	Claims		NO

## 2. Citations and explanations

1. This report makes reference to the following documents:

D1: US-A-3411 219 (BARTHOLOMEW RUSSELL W)

19 November 1968

D2: US-A-3 394 466 (HEIDTMANN DONALD S) 30 July 1968

D3: WO 97/32071 A (CAMP MARTIN; MORGAN MALCOLM (AU); SOUTHCORP WHITEGOODS PTY LTD (AU))

4 September 1997

D4: US-A-3300 869 (COTTON CURRAN D ET AL)

31 January 1967

2. The present application does not meet the requirements of PCT Article 33(1) because the subject matter of independent claims 1, 8 and 12 is not novel within the meaning of PCT Article 33(2). The reasons are:

2.1 D1 (see column 6, line 54 to column 7, line 52; the references in parentheses are to this document) discloses:

Device for determining the conductance of laundry in a clothes drier which comprises at least two

electrodes (136, 140), wherein the device comprises means for dissipating heat from at least one part of at least one of the electrodes (136, 140).

In D1 the airflow introduced by the ventilator 23', the exhaust air opening 134, the metal screen 136 (which also forms an electrode) and the exhaust air channel (137) are considered to be "means for dissipating heat". In particular, air reaching the electrodes has been cooled by the laundry to be dried and its temperature is therefore lower than when it enters the drum. Thus, the airflow lowers the temperature of the electrodes compared with the temperature in the rear drum area.

Therefore, all the features of the subject matter of independent claim 1 are known from D1.

2.2 D1 further discloses a clothes drier (10') which comprises at least a receiving area (13') for laundry and at least two electrodes (136, 140) for measuring the conductance of the laundry, wherein means for cooling at least a part of at least one of the electrodes (136, 140) are further provided in the clothes drier (10').

Therefore, all the features of the subject matter of independent claim 8 are also known from D1.

2.3 D1 further discloses a process for preventing electrodes (136, 140) for measuring conductance in a clothes drier (10') from becoming coated, wherein the temperature of the electrodes (136, 140) is selectively controlled by means for dissipating heat.

In D1 friction between the laundry and the electrode surfaces (D4, column 6, lines 7-16, may also be referred to in this context) is considered to be a process for preventing electrodes for measuring conductance in a clothes drier from becoming coated. Moreover, the electrodes are arranged in the relatively cooler rear area of the drum directly at the air outlet, thereby giving the same advantages as those described in the present application (see, for example, page 2, line 31 to page 3, line 11).

D1 discloses that the temperature in the drum and, thus, also the temperature of the electrodes is selectively controlled: that is, during part of the drying cycle the temperature is reduced (see column 3, line 71 to column 4, line 7). Moreover, selective temperature control to prevent laundry from becoming excessively hot is a routine measure in clothes dryers, although in D1 such a control system is not described in detail (D2, column 4, lines 57-67, and column 6, lines 19-61, may also be referred to in this context).

Therefore, all the features of independent claim 12 are also known from D1.

- 2.4 Similarly, D2 (see column 2, line 18 to column 3, line 74, column 4, lines 57-67, column 6, lines 19-61 and drawings) and D3 (see abstract and figures 1-2) each disclose all the features of the subject matter of independent claims 1, 8 and 12.
- 2.5 It should also be noted that the wording "means for dissipating heat" is so broad that D4 (see column 4,

line 29 to column 5, line 22 and drawings) can be considered prejudicial to novelty. The reasons are:

The conductance electrodes (144, 145; 200, 201) consist of conductive, metallic material which is therefore thermally conductive. Consequently, heat is dissipated through the electrode surfaces, in particular when the heating device of the drier is switched off at the end of the drying cycle.

3. D1-D3 each show the additional features of dependent claims 2-4, 6, 7, 9 and 11-16 (see the passages cited in the search report) and the subject matter of these claims therefore lacks novelty and consequently fails to satisfy the criterion in PCT Article 33(2).
4. The combinations of features contained in dependent claims 5, 10 or 17 appear to be neither known from nor disclosed by the available prior art. Therefore, they apparently meet the requirements of PCT Article 33(1). The reasons are:

The problem addressed by the present invention may be considered that of providing an alternative, effective means of reducing the coating of electrodes for measuring conductance in a clothes drier.

None of the disclosed devices or processes for determining the conductance of laundry in a clothes drier discloses or suggests dissipating heat from the electrodes by selectively supplying cooling/ambient air.

5. The subject matter of claims 1-17 is evidently industrial applicable (**PCT Article 33(4)**).

Further observations

6. Dependent claim 7 does not meet the requirements of **PCT Article 6** because the subject matter for which protection is sought is not clearly defined. The claim attempts to define the device by the relationship of the electrodes to the clothes drier. However, the clothes drier is not part of the claimed device.